

WHAT IS CLAIMED IS:

1. A marker for use with X-ray sensitive film
for disposition between an X-ray source and the X-ray
sensitive film to provide identifying indicia on the X-
5 ray sensitive film when the film is exposed to X-ray
energy from the X-ray source, the marker comprising:

a support of material that does not
substantially absorb X-ray energy so that the support is
not visible on the X-ray sensitive film;

10 indicia forming pockets in the support for
forming the shapes of the identifying indicia; and

a mixture of material in the pockets forming
the indicia comprising a predetermined percentage of a
tungsten material to provide X-ray absorbing
15 characteristics to absorb X-ray energy to form
substantially transparent identifying indicia which are
readily visible when the film has been exposed to the X-
rays.

2. A marker in accordance with Claim 1
20 wherein the support comprises:

a plastic block having the indicia forming
pockets engraved on one side thereof.

3. A marker in accordance with Claim 2
wherein the mixture of material forming the indicia
25 comprises a screen printing ink mixed with the tungsten
material to provide a flowable material.

4. A marker in accordance with Claim 3
wherein the tungsten material is tungsten oxide.

5. A marker in accordance with Claim 3 wherein the screen printing ink is a white ink to improve contrast of the indicia.

6. A marker in accordance with Claim 3
5 comprising:

the mixture of material in the pockets
extending to adjacent the side of the block.

7. A marker in accordance with Claim 1 in
which the pockets are reversely cut into a face of the
10 support.

8. A marker in accordance with Claim 1 in
which the support comprises:
a block of transparent plastic;
a hole extending through the block from one
15 face to the opposite face of the block; and
at least one magnet in a recessed pocket in the
face of the block having the reversely cut pockets which
contain the indicia mixture.

9. A marker in accordance with Claim 1 in
20 which the pockets are cut to appear in alpha/numeric
characters when viewed from the facing side of the
support.

10. A marker in accordance with Claim 9 in
which the pockets are formed on the top side of the
25 marker; and
at least one magnet being on the lower side of
the marker.

11. A marker in accordance with Claim 1 wherein the marker is for use in a flip marker system, the marker comprising:

5 a flip marker body having an end to snap into a holder of the flip marker system; and
the support and indicia mixture in the support being mounted in a central cavity in the flip marker body.

12. A marker in accordance with Claim 4 comprising:

a textured frosty surface on the block.

13. A marker for use with X-ray sensitive film for disposition between an X-ray source and the X-ray sensitive film to provide identifying indicia on the X-ray sensitive film when the film is exposed to X-ray energy from the X-ray source, the marker comprising:

a support of material that does not absorb X-ray energy so as not to be visible on the X-ray sensitive film;

20 indicia forming pockets in the support reversely engraved to reversely readable identifying indicia; and

a mixture of material in the pockets comprising a predetermined percentage of a tungsten material to
25 provide X-ray absorbing characteristics to absorb X-ray energy to form normal readable, substantially transparent identifying indicia corresponding to the material on the film which are readily visible when the film has been exposed to the X-rays with the reversely engraved letters
30 positioned to be read from the rear side of the exposed X-ray film.

14. A marker in accordance with Claim 13 wherein the mixture of material has a specific gravity of at least eleven.

15 15. A marker in accordance with Claim 13 wherein the mixture has an absorption equivalency of at least 90% of that of lead.

16. A marker in accordance with Claim 13 comprising a positioning device associated with support for positioning the support relative to the X-ray film.

10 17. A method of making a marker for use with X-ray sensitive film for disposition between an X-ray source and the X-ray film to provide identifying indicia on the X-ray when the film is subjected to X-ray energy from the X-ray source, the method comprising:

15 providing a support;
forming pockets in the support in the shape of indicia; and

filling the pockets with an indicia forming mixture of material having X-ray absorbing
20 characteristics to absorb X-ray energy to form substantially clear identifying indicia on the X-ray film, the clear indicia being readily visible when the film has been exposed to the X-rays.

18. A method in accordance with Claim 17
25 comprising:

providing an extrudable mixture of material for the indicia containing a tungsten ingredient and filling the pockets therewith; and

allowing the extrudable mixture to solidify in
30 the pockets.

19. A method in accordance with Claim 17
comprising:
solidifying the mixture *in situ* in pockets.

20. A method in accordance with Claim 17
5 comprising:
providing an indicia mixture comprising screen
printing ink and a tungsten ingredient; and
wherein the filling of the pockets comprises
forcing the mixture of ink and tungsten ingredient into
10 the pockets.

21. A method in accordance with Claim 17
comprising forcing the indicia forming mixture into the
pockets with a squeegee and removing any excess material
from the surface of the block.

15 22. A method in accordance with Claim 17
comprising engraving the pockets in a surface of the
support.

23. A method in accordance with Claim 22
comprising engraving reversely formed, alpha/numeric
20 indicia into a surface of the support.

24. A method in accordance with Claim 21
wherein the engraving of the pockets comprises:
using a CNC machine to engrave letters and
numbers thereby forming the pockets in the plastic block.

25 25. A method in accordance with Claim 21
comprising:
providing a block of plastic as the support and
engraving the pockets in one face of the plastic block.

26. A method in accordance with Claim 23
comprising:

after filling the pockets removing any excess
mixture from the face of the block.

5 27. A method in accordance with Claim 17
comprising:

providing a metal layer adjacent the indicia to
filter high X-ray energy to provide improved clarity for
the identifying indicia.

10 28. A marker for use with X-ray film to
provide identifying indicia on the film comprising:

indicia formed of a predetermined percentage of
a tungsten material to provide X-ray absorbing
characteristics to absorb X-ray energy to form the
15 identifying indicia; and

a metal layer adjacent the indicia to filter
high X-ray energy about the indicia to provide improved
clarity to the identifying indicia on the film.

20 29. A marker in accordance with Claim 28
wherein the metal layer comprises:

a metal backing of stainless steel.

30. A marker in accordance with Claim 28
wherein the marker for mammography has a metal layer of
about 0.004 to 0.012 inch in thickness.

25 31. A marker in accordance with Claim 28
wherein the tungsten material has a thickness of about
0.020 inch.

32. A marker in accordance with Claim 28 wherein the marker is used for general X-rays and has a metal layer of about 1/8 inch in thickness.

33. A marker in accordance with Claim 32
5 wherein the tungsten material is about 0.020 inch in thickness.

34. A marker in accordance with Claim 28 comprising:
the metal layer being a metal strip;
10 a plastic block having pockets with the indicia in one face of the block; and
the metal strip attached to an opposite face of the plastic block.

35. A marker in accordance with Claim 34
15 comprising:
a groove in the opposite face having the metal strip disposed therein; and
an adhesive adhering the strip to the block.

36. A marker in accordance with Claim 35
20 wherein the adhesive comprises:
a first adhesive coating on one side of an adhesive tape and a second adhesive coating on the other side of the adhesive tape; and
the adhesive tape having a light color to
25 contrast with dark colored indicia.